A SYSTEM AND METHOD FOR REAL-TIME PRICING WITH VOLUME DISCOUNTING

5

10

20

Robert A. Foster

RELATED PATENTS

The present application is related to the commonly owned U.S. Patent No. 6,052,672 entitled "DATA PROCESSING SYSTEM FOR COMPLEX PRICING AND TRANSACTIONAL ANALYSIS," which is hereby incorporated by reference herein in its entirety.

RELATED APPLICATIONS

The present application is related to the co-pending and commonly owned U.S.

Patent application Serial No. 09/183,335 entitled "DATA PROCESSING SYSTEM FOR PRICING, COSTING AND BILLING OF FINANCIAL TRANSACTIONS," which is hereby incorporated by reference herein in its entirety.

COMPUTER PROGRAM LISTING APPENDIX

The computer program listing appendix attached hereto consists of two (2) identical compact disks, copy 1 and copy 2, each containing a listing of the software code for embodiments of components of this invention. Each compact disk contains the following files (date and time of creation, size in bytes, filename):

	Directory	of D:\		
25	02/01/01	09:33a	<dir></dir>	
	02/01/01	09:33a	<dir></dir>	
	01/31/01	03:31p	<dir></dir>	M-9381 US
	Directory	of D:\M-93	81 US	
	01/31/01	03:31p	<dir></dir>	•
30	02/01/01	09:33a	<dir></dir>	
	01/31/01	03:24p	<dir></dir>	CIS
	01/31/01	03:27p	<dir></dir>	COR
	01/31/01	03:27p	<dir></dir>	LIB

	01/31/01	03:27p	<dir></dir>	LXN
	01/31/01	03:28p	<dir></dir>	MFS
	01/31/01	03:30p	<dir></dir>	MSC
	01/31/01	03:30p	<dir></dir>	SCRIPTS
5	01/31/01	03:31p	<dir></dir>	SQL
	01/31/01	03:35p	<dir></dir>	WEBAPP
	Directory	of D:\M-93	81 US\CIS	
	01/31/01	03:24p	<dir></dir>	
	01/31/01	03:31p	<dir></dir>	••
10	01/29/01	12:28p	35,689	BCIS401_CBL.TXT
	01/29/01	12:29p	51,724	BCIS411_CBL.TXT
	01/29/01	12:29p	13,593	BCIS422_CBL.TXT
	01/29/01	10:38a	48,235	ICIS100_CBL.TXT
	01/29/01	10:50a	32,018	ICIS100_CPY.TXT
15	01/29/01	10:38a	44,419	ICIS101_CBL.TXT
	01/29/01	10:50a	31,518	ICIS101_CPY.TXT
	01/29/01	10:38a	42,227	ICIS102_CBL.TXT
	01/29/01	10:51a	25,203	ICIS102_CPY.TXT
	01/29/01	10:38a	51,159	ICIS103_CBL.TXT
20	01/29/01	10:51a	38,667	ICIS103_CPY.TXT
	01/29/01	10:38a	46,375	ICIS104_CBL.TXT
	01/29/01	10:51a	35,859	ICIS104_CPY.TXT
	01/29/01	10:38a	51,279	ICIS106_CBL.TXT
	01/29/01	10:51a	38,280	ICIS106_CPY.TXT
25	01/29/01	10:38a	39,990	ICIS111_CBL.TXT
	01/29/01	10:51a	25,475	ICIS111_CPY.TXT
	01/29/01	10:38a	32,573	ICIS112_CBL.TXT
	01/29/01	10:51a	16,025	ICIS112_CPY.TXT
	01/29/01	10:38a	40,689	ICIS140_CBL.TXT
30	01/29/01	10:51a	24,440	ICIS140_CPY.TXT
	01/29/01	10:38a	31,169	ICIS141_CBL.TXT
	01/29/01	10:51a	16,346	ICIS141_CPY.TXT
	01/29/01	10:38a	67,112	ICIS142_CBL.TXT

	01/29/01	10:51a	47,991 ICIS142_CPY.TXT
	01/29/01	10:38a	43,061 ICIS143_CBL.TXT
	01/29/01	10:51a	30,175 ICIS143_CPY.TXT
	01/29/01	10:38a	52,646 ICIS190_CBL.TXT
5	01/29/01	10:51a	35,127 ICIS190_CPY.TXT
	01/29/01	10:38a	54,168 ICIS191_CBL.TXT
	01/29/01	10:51a	36,971 ICIS191_CPY.TXT
	01/29/01	10:38a	69,765 ICIS192_CBL.TXT
	01/29/01	10:51a	50,485 ICIS192_CPY.TXT
10	01/29/01	10:38a	67,750 ICIS193_CBL.TXT
	01/29/01	10:51a	49,658 ICIS193_CPY.TXT
	01/29/01	10:38a	52,048 ICIS194_CBL.TXT
	01/29/01	10:51a	35,084 ICIS194_CPY.TXT
	01/29/01	10:39a	72,666 ICIS196_CBL.TXT
15	01/29/01	10:51a	52,178 ICIS196_CPY.TXT
	01/29/01	10:39a	62,728 ICIS199_CBL.TXT
	01/29/01	10:51a	45,142 ICIS199_CPY.TXT
	01/29/01	10:39a	51,443 ICIS701_CBL.TXT
	01/29/01	10:51a	38,177 ICIS701_CPY.TXT
20	01/29/01	10:39a	72,098 ICIS702_CBL.TXT
	01/29/01	10:51a	52,5 66 ICIS702_CPY.TXT
	01/29/01	10:39a	46,680 ICIS703_CBL.TXT
	01/29/01	10:51a	33,441 ICIS703_CPY.TXT
	01/29/01	10:39a	68,603 ICIS704_CBL.TXT
25	01/29/01	10:51a	48,149 ICIS704_CPY.TXT
	01/29/01	10:39a	49,424 ICIS705_CBL.TXT
	01/29/01	10:51a	38,919 ICIS705_CPY.TXT
	01/29/01	10:39a	58,596 ICIS706_CBL.TXT
	01/29/01	10:51a	41,118 ICIS706_CPY.TXT
30	01/29/01	10:39a	49,731 ICIS707_CBL.TXT
	01/29/01	10:51a	38,992 ICIS707_CPY.TXT
	01/29/01	10:39a	62,834 ICIS708_CBL.TXT
	01/29/01	10:51a	44,418 ICIS708_CPY.TXT

	01/29/01 10:39a	45,267 ICIS709_CBL.TXT
	01/29/01 10:52a	27,989 ICIS709_CPY.TXT
	01/29/01 10:39a	70,396 ICIS710_CBL.TXT
	01/29/01 10:52a	50,847 ICIS710_CPY.TXT
5	01/29/01 10:39a	50,533 ICIS711_CBL.TXT
	01/29/01 10:52a	39,666 ICIS711_CPY.TXT
	01/29/01 10:39a	66,244 ICIS712_CBL.TXT
	01/29/01 10:52a	47,318 ICIS712_CPY.TXT
	01/29/01 10:39a	43,092 ICIS713_CBL.TXT
10	01/29/01 10:52a	26,459 ICIS713_CPY.TXT
	01/29/01 10:39a	73,837 ICIS714_CBL.TXT
	01/29/01 10:52a	53,861 ICIS714_CPY.TXT
	01/29/01 10:39a	37,260 ICIS717_CBL.TXT
	01/29/01 10:52a	20,949 ICIS717_CPY.TXT
15	01/29/01 10:39a	72,726 ICIS718_CBL.TXT
	01/29/01 10:52a	53,256 ICIS718_CPY.TXT
	01/29/01 10:39a	70,867 ICIS723_CBL.TXT
	01/29/01 10:52a	58,288 ICIS723_CPY.TXT
	01/29/01 10:39a	76,278 ICIS724_CBL.TXT
20	01/29/01 10:52a	55,563 ICIS724_CPY.TXT
	01/29/01 10:39a	52,323 ICIS727_CBL.TXT
	01/29/01 10:52a	40,879 ICIS727_CPY.TXT
	01/29/01 10:39a	72,519 ICIS728_CBL.TXT
	01/29/01 10:52a	51,904 ICIS728_CPY.TXT
25	01/29/01 10:39a	69,747 ICIS729_CBL.TXT
	01/29/01 10:52a	56,052 ICIS729_CPY.TXT
	01/29/01 10:39a	73,137 ICIS730_CBL.TXT
	01/29/01 10:52a	52,659 ICIS730_CPY.TXT
	01/29/01 10:39a	50,833 ICIS731_CBL.TXT
30	01/29/01 10:52a	39,710 ICIS731_CPY.TXT
	01/29/01 10:39a	65,788 ICIS732_CBL.TXT
	01/29/01 10:52a	46,050 ICIS732_CPY.TXT
	01/29/01 10:39a	64,002 ICIS999_CBL.TXT

01/29/01 01/29/01	10:52a	45,683 ICIS999_CPY.TXT
01/29/01		
	12:32p	46,994 LCIS401_CBL.TXT
01/29/01	12:32p	27,233 LCIS402_CBL.TXT
01/29/01	12:32p	24,540 LCIS403_CBL.TXT
01/29/01	12:32p	23,580 LCIS404_CBL.TXT
01/29/01	12:32p	23,940 LCIS405_CBL.TXT
01/29/01	12:32p	28,032 LCIS406_CBL.TXT
01/29/01	12:32p	22,800 LCIS407_CBL.TXT
01/29/01	12:33p	21,556 LCIS408_CBL.TXT
01/29/01	12:33p	33,308 LCIS409_CBL.TXT
01/29/01	12:33p	31,048 LCIS411_CBL.TXT
01/29/01	12:33p	21,525 LCIS428_CBL.TXT
01/29/01	12:33p	21,497 LCIS429_CBL.TXT
01/29/01	12:33p	34,823 LCIS430_CBL.TXT
01/29/01	12:33p	32,605 LCIS431_CBL.TXT
01/29/01	12:33p	27,771 LCIS432_CBL.TXT
01/29/01	12:33p	29,055 LCIS433_CBL.TXT
01/29/01	12:34p	27,890 LCIS434_CBL.TXT
01/29/01	12:34p	23,259 LCIS440_CBL.TXT
01/29/01	12:34p	22,995 LCIS441_CBL.TXT
01/29/01	12:34p	23,029 LCIS442_CBL.TXT
01/29/01	12:34p	23,025 LCIS443_CBL.TXT
01/29/01	12:34p	22,786 LCIS444_CBL.TXT
01/29/01	12:34p	27,668 LCIS445_CBL.TXT
01/29/01	12:34p	29,873 LCIS449_CBL.TXT
01/29/01	12:34p	76,689 LCIS451_CBL.TXT
01/29/01	10:46a	317 LCIS451_CPY.TXT
01/29/01	12:34p	55,568 LCIS452_CBL.TXT
01/29/01	10:46a	317 LCIS452_CPY.TXT
01/29/01	12:35p	54,293 LCIS455_CBL.TXT
01/29/01	10:46a	317 LCIS455_CPY.TXT
01/29/01	12:35p	66,733 LCIS460_CBL.TXT
01/29/01	12:35p	37,261 LCIS462_CBL.TXT
	01/29/01 01/29/01	01/29/01 12:32p 01/29/01 12:32p 01/29/01 12:32p 01/29/01 12:32p 01/29/01 12:32p 01/29/01 12:33p 01/29/01 12:34p

	• • • • • • • • • • • • • • • • • • • •	
	01/29/01 12:35p	99,936 LCIS463_CBL.TXT
	01/29/01 04:01p	104,294 RCIS100m.TXT
	01/29/01 04:02p	84,216 RCIS101m.TXT
	01/29/01 04:02p	87,439 RCIS102m.TXT
5	01/29/01 04:26p	92,074 RCIS103m.TXT
	01/29/01 04:26p	83,317 RCIS104m.TXT
	01/29/01 04:26p	92,933 RCIS106m.TXT
	01/29/01 04:26p	83,164 RCIS111m.TXT
	01/29/01 04:34p	61,274 RCIS112m.TXT
10	01/29/01 04:26p	89,756 RCIS140m.TXT
	01/29/01 04:26p	70,581 RCIS141m.TXT
	01/29/01 04:26p	112,220 RCIS142m.TXT
	01/29/01 04:27p	69,415 RCIS143m.TXT
	01/29/01 04:34p	85,294 RCIS190m.TXT
15	01/29/01 04:34p	87,768 RCIS191m.TXT
	01/29/01 04:34p	102,190 RCIS192m.TXT
	01/29/01 04:34p	105,248 RCIS193m.TXT
	01/29/01 04:34p	85,497 RCIS194m.TXT
	01/29/01 04:34p	107,615 RCIS196m.TXT
20	01/29/01 04:34p	99,720 RCIS199m.TXT
	01/29/01 04:28p	99,722 RCIS701m.TXT
	01/29/01 04:34p	115,070 RCIS702m.TXT
	01/29/01 04:29p	85,799 RCIS703m.TXT
	01/29/01 04:34p	104,168 RCIS704m.TXT
25	01/29/01 04:29p	85,717 RCIS705m.TXT
	01/29/01 04:34p	93,370 RCIS706m.TXT
	01/29/01 04:29p	88,711 RCIS707m.TXT
	01/29/01 04:34p	101,296 RCIS708m.TXT
	01/29/01 04:29p	97,929 RCIS709m.TXT
30	01/29/01 04:34p	108,786 RCIS710m.TXT
	01/29/01 04:29p	91,554 RCIS711m.TXT
	01/29/01 04:34p	107,841 RCIS712m.TXT
	01/29/01 04:29p	95,314 RCIS713m.TXT

	01/29/01 04:34p	116,846 RCIS714m.TXT
	01/29/01 04:29p	82,667 RCIS717m.TXT
	01/29/01 04:34p	105,771 RCIS718m.TXT
	01/29/01 04:31p	125,556 RCIS723m.TXT
5	01/29/01 04:34p	118,032 RCIS724m.TXT
	01/29/01 04:31p	86,801 RCIS727m.TXT
	01/29/01 04:34p	111,967 RCIS728m.TXT
	01/29/01 04:31p	117,336 RCIS729m.TXT
	01/29/01 04:34p	109,443 RCIS730m.TXT
10	01/29/01 04:30p	86,482 RCIS731m.TXT
	01/29/01 04:34p	105,040 RCIS732m.TXT
	01/29/01 04:34p	97,329 RCIS999m.TXT
	01/29/01 10:39a	144,095 SCIS100_CBL.TXT
	01/29/01 10:53a	343 SCIS100_CPY.TXT
15	01/29/01 10:39a	91,151 SCIS101_CBL.TXT
	01/29/01 10:54a	343 SCIS101_CPY.TXT
	01/29/01 10:39a	90,179 SCIS102_CBL.TXT
	01/29/01 10:54a	349 SCIS102_CPY.TXT
	01/29/01 10:39a	124,449 SCIS103_CBL.TXT
20	01/29/01 10:54a	349 SCIS103_CPY.TXT
	01/29/01 10:39a	84,119 SCIS104_CBL.TXT
	01/29/01 10:54a	340 SCIS104_CPY.TXT
	01/29/01 10:39a	140,052 SCIS106_CBL.TXT
	01/29/01 10:54a	346 SCIS106_CPY.TXT
25	01/29/01 10:39a	84,012 SCIS111_CBL.TXT
	01/29/01 10:54a	337 SCIS111_CPY.TXT
	01/29/01 12:35p	92,662 SCIS112_CBL.TXT
	01/29/01 10:39a	101,417 SCIS140_CBL.TXT
	01/29/01 10:54a	343 SCIS140_CPY.TXT
30	01/29/01 10:39a	74,035 SCIS141_CBL.TXT
	01/29/01 10:39a	299,844 SCIS142_CBL.TXT
	01/29/01 10:54a	346 SCIS142_CPY.TXT
	01/29/01 12:41p	87,824 SCIS143_CBL.TXT

	0,0,4, 11		
	01/29/01	10:39a	118,965 SCIS190_CBL.TXT
	01/29/01	10:39a	126,028 SCIS191_CBL.TXT
	01/29/01	10:39a	140,902 SCIS192_CBL.TXT
	01/29/01	10:39a	136,390 SCIS193_CBL.TXT
5	01/29/01	10:39a	118,178 SCIS194_CBL.TXT
	01/29/01	10:39a	146,211 SCIS196_CBL.TXT
	01/29/01	10:39a	124,426 SCIS199_CBL.TXT
	01/29/01	10:39a	169,468 SCIS701_CBL.TXT
	01/29/01	10:55a	346 SCIS701_CPY.TXT
10	01/29/01	10:39a	139,090 SCIS702_CBL.TXT
	01/29/01	10:40a	88,998 SCIS703_CBL.TXT
	01/29/01	10:55a	346 SCIS703_CPY.TXT
	01/29/01	10:40a	134,605 SCIS704_CBL.TXT
	01/29/01	10:40a	104,320 SCIS705_CBL.TXT
15	01/29/01	10:55a	349 SCIS705_CPY.TXT
	01/29/01	10:40a	124,457 SCIS706_CBL.TXT
	01/29/01	10:40a	91,408 SCIS707_CBL.TXT
	01/29/01	10:55a	349 SCIS707_CPY.TXT
	01/29/01	10:40a	125,202 SCIS708_CBL.TXT
20	01/29/01	10:40a	116,165 SCIS709_CBL.TXT
	01/29/01	10:55a	343 SCIS709_CPY.TXT
	01/29/01	10:40a	148,219 SCIS710_CBL.TXT
	01/29/01	10:40a	93,778 SCIS711_CBL.TXT
	01/29/01	10:55a	346 SCIS711_CPY.TXT
25	01/29/01	10:40a	126,338 SCIS712_CBL.TXT
	01/29/01	10:40a	214,783 SCIS713_CBL.TXT
	01/29/01	10:55a	675 SCIS713_CPY.TXT
	01/29/01	10:40a	136,369 SCIS714_CBL.TXT
	01/29/01	10:40a	84,799 SCIS717_CBL.TXT
30	01/29/01	10:56a	349 SCIS717_CPY.TXT
	01/29/01	10:40a	127,780 SCIS718_CBL.TXT
	01/29/01	10:40a	468,380 SCIS723_CBL.TXT
	01/29/01	10:56a	349 SCIS723_CPY.TXT

	0,0,1,1		
	01/29/01	10:40a	186,159 SCIS724_CBL.TXT
	01/29/01	10:40a	238,079 SCIS727_CBL.TXT
	01/29/01	10:56a	349 SCIS727_CPY.TXT
	01/29/01	10:40a	128,803 SCIS728_CBL.TXT
5	01/29/01	10:40a	436,585 SCIS729_CBL.TXT
	01/29/01	10:56a	346 SCIS729_CPY.TXT
	01/29/01	10:40a	175,547 SCIS730_CBL.TXT
	01/29/01	10:40a	86,311 SCIS731_CBL.TXT
	01/29/01	10:57a	349 SCIS731_CPY.TXT
10	01/29/01	10:40a	127,420 SCIS732_CBL.TXT
	01/29/01	10:40a	144,640 SCIS999_CBL.TXT
	Directory	of D:\M	I-9381 US\COR
	01/31/01	03:27p	<dir> .</dir>
	01/31/01	03:31p	<dir></dir>
15	01/29/01	10:41a	16,105 BCOR001_CBL.TXT
	01/29/01	10:41a	16,691 BCOR002_CBL.TXT
	01/29/01	12:29p	68,108 BCOR003_CBL.TXT
	01/29/01	10:39a	25,942 ICOR001_CBL.TXT
	01/29/01	10:52a	8,372 ICOR001_CPY.TXT
20	01/29/01	10:39a	43,927 ICOR011_CBL.TXT
	01/29/01	10:52a	26,969 ICOR011_CPY.TXT
	01/29/01	10:39a	38,679 ICOR012_CBL.TXT
	01/29/01	10:52a	22,122 ICOR012_CPY.TXT
	01/29/01	10:39a	40,805 ICOR013_CBL.TXT
25	01/29/01	10:52a	24,879 ICOR013_CPY.TXT
	01/29/01	10:39a	41,479 ICOR016_CBL.TXT
	01/29/01	10:52a	28,351 ICOR016_CPY.TXT
	01/29/01	10:39a	41,295 ICOR017_CBL.TXT
	01/29/01	10:52a	27,875 ICOR017_CPY.TXT
30	01/29/01	10:39a	47,559 ICOR019_CBL.TXT
	01/29/01	10:53a	29,279 ICOR019_CPY.TXT
	01/29/01	10:39a	41,090 ICOR020_CBL.TXT
	01/29/01	10:53a	27,139 ICOR020_CPY.TXT

	01/29/01 10:39a	42,011 ICOR021_CBL.TXT
	01/29/01 10:53a	29,334 ICOR021_CPY.TXT
	01/29/01 12:35p	30,078 ICOR022_CBL.TXT
	01/29/01 10:53a	8,651 ICOR022_CPY.TXT
5	01/29/01 10:39a	37,393 ICOR023_CBL.TXT
	01/29/01 10:53a	21,514 ICOR023_CPY.TXT
	01/29/01 10:39a	64,580 ICOR025_CBL.TXT
	01/29/01 10:53a	46,243 ICOR025_CPY.TXT
	01/29/01 10:39a	42,068 ICOR028_CBL.TXT
10	01/29/01 10:53a	29,929 ICOR028_CPY.TXT
	01/29/01 10:39a	56,659 ICOR050_CBL.TXT
	01/29/01 10:53a	38,833 ICOR050_CPY.TXT
	01/29/01 10:39a	54,144 ICOR051_CBL.TXT
	01/29/01 10:53a	36,342 ICOR051_CPY.TXT
15	01/29/01 10:39a	49,390 ICOR052_CBL.TXT
	01/29/01 10:53a	32,346 ICOR052_CPY.TXT
	01/29/01 10:39a	61,073 ICOR053_CBL.TXT
	01/29/01 10:53a	42,464 ICOR053_CPY.TXT
	01/29/01 10:39a	49,137 ICOR054_CBL.TXT
20	01/29/01 10:53a	32,156 ICOR054_CPY.TXT
	01/29/01 10:39a	57,354 ICOR055_CBL.TXT
	01/29/01 10:53a	39,006 ICOR055_CPY.TXT
	01/29/01 10:39a	70,700 ICOR056_CBL.TXT
	01/29/01 10:53a	50,684 ICOR056_CPY.TXT
25	01/29/01 10:39a	49,283 ICOR057_CBL.TXT
	01/29/01 10:53a	32,345 ICOR057_CPY.TXT
	01/29/01 10:39a	67,585 ICOR058_CBL.TXT
	01/29/01 10:53a	48,403 ICOR058_CPY.TXT
	01/29/01 10:39a	68,072 ICOR059_CBL.TXT
30	01/29/01 10:53a	47,277 ICOR059_CPY.TXT
	01/29/01 12:41p	79,984 LCOR001_CBL.TXT
	01/29/01 10:46a	323 LCOR001_CPY.TXT
	01/29/01 12:35p	27,847 LCOR002_CBL.TXT

	030717 12	
	01/29/01 12:36p	29,319 LCOR003_CBL.TXT
	01/29/01 12:36p	33,886 LCOR004_CBL.TXT
	01/29/01 12:36p	28,433 LCOR005_CBL.TXT
	01/29/01 01:35p	26,328 LCOR006_CBL.TXT
5	01/29/01 12:36p	23,979 LCOR007_CBL.TXT
	01/29/01 12:42p	27,505 LCOR010_CBL.TXT
	01/29/01 04:30p	57,676 RCOR000m.TXT
	01/29/01 04:30p	53,152 RCOR001m.TXT
	01/29/01 04:34p	57,916 RCOR002m.TXT
10	01/29/01 04:34p	53,337 RCOR007m.TXT
	01/29/01 04:30p	92,054 RCOR011m.TXT
	01/29/01 04:30p	86,881 RCOR012m.TXT
	01/29/01 04:30p	86,596 RCOR013m.TXT
	01/29/01 04:30p	82,400 RCOR016m.TXT
15	01/29/01 04:30p	83,438 RCOR017m.TXT
	01/29/01 04:30p	59,213 RCOR018m.TXT
	01/29/01 04:30p	100,528 RCOR019m.TXT
	01/29/01 04:30p	84,268 RCOR020m.TXT
	01/29/01 04:30p	81,747 RCOR021m.TXT
20	01/29/01 04:30p	81,903 RCOR023m.TXT
	01/29/01 04:35p	98,146 RCOR025m.TXT
	01/29/01 04:30p	81,155 RCOR028m.TXT
	01/29/01 04:30p	46,097 RCOR033m.TXT
	01/29/01 04:35p	91,065 RCOR050m.TXT
25	01/29/01 04:35p	87,584 RCOR051m.TXT
	01/29/01 04:35p	80,488 RCOR052m.TXT
	01/29/01 04:35p	96,711 RCOR053m.TXT
	01/29/01 04:35p	81,410 RCOR054m.TXT
	01/29/01 04:35p	92,375 RCOR055m.TXT
30	01/29/01 04:35p	102,448 RCOR056m.TXT
	01/29/01 04:35p	81,376 RCOR057m.TXT
	01/29/01 04:35p	104,131 RCOR058m.TXT
	01/29/01 04:35p	104,784 RCOR059m.TXT

	01/29/01 12:42p	93,661 SCOR000_CBL.TXT
	01/29/01 10:57a	348 SCOR000_CPY.TXT
	01/29/01 12:36p	86,049 SCOR001_CBL.TXT
	01/29/01 10:57a	348 SCOR001_CPY.TXT
5	01/29/01 10:40a	53,682 SCOR007_CBL.TXT
	01/29/01 10:40a	124,142 SCOR011_CBL.TXT
	01/29/01 10:57a	349 SCOR011_CPY.TXT
	01/29/01 10:40a	87,161 SCOR012_CBL.TXT
	01/29/01 10:57a	343 SCOR012_CPY.TXT
10	01/29/01 10:40a	123,301 SCOR013_CBL.TXT
	01/29/01 10:57a	674 SCOR013_CPY.TXT
	01/29/01 10:40a	81,407 SCOR016_CBL.TXT
	01/29/01 10:57a	349 SCOR016_CPY.TXT
	01/29/01 10:40a	80,331 SCOR017_CBL.TXT
15	01/29/01 10:57a	349 SCOR017_CPY.TXT
	01/29/01 12:36p	96,171 SCOR018_CBL.TXT
	01/29/01 10:41a	154,792 SCOR019_CBL.TXT
	01/29/01 10:57a	346 SCOR019_CPY.TXT
	01/29/01 10:41a	81,191 SCOR020_CBL.TXT
20	01/29/01 10:57a	346 SCOR020_CPY.TXT
	01/29/01 10:41a	76,854 SCOR021_CBL.TXT
	01/29/01 10:57a	346 SCOR021_CPY.TXT
	01/29/01 10:41a	62,279 SCOR022_CBL.TXT
	01/29/01 10:41a	82,063 SCOR023_CBL.TXT
25	01/29/01 10:57a	340 SCOR023_CPY.TXT
	01/29/01 12:36p	49,752 SCOR024_CBL.TXT
	01/29/01 10:57a	348 SCOR024_CPY.TXT
	01/29/01 10:41a	126,300 SCOR025_CBL.TXT
	01/29/01 10:41a	75,975 SCOR028_CBL.TXT
30	01/29/01 10:58a	349 SCOR028_CPY.TXT
	01/29/01 10:41a	47,512 SCOR029_CBL.TXT
	01/29/01 12:36p	47,734 SCOR033_CBL.TXT
	01/29/01 10:41a	120,091 SCOR050_CBL.TXT

	01/29/01 10:41a	118,238 SCOR051_CBL.TXT
	01/29/01 10:41a	194,847 SCOR052_CBL.TXT
	01/29/01 10:41a	249,802 SCOR053_CBL.TXT
	01/29/01 10:41a	113,857 SCOR054_CBL.TXT
5	01/29/01 10:41a	122,912 SCOR055_CBL.TXT
	01/29/01 10:41a	144,769 SCOR056_CBL.TXT
	01/29/01 10:41a	145,415 SCOR057_CBL.TXT
	01/29/01 10:41a	154,295 SCOR058_CBL.TXT
	01/29/01 10:41a	128,384 SCOR059_CBL.TXT
10	01/29/01 10:41a	18,359 SCOR099_CBL.TXT
	Directory of D:\M-93	381 US\LIB
	01/31/01 03:27p	<dir> .</dir>
	01/31/01 03:31p	<dir></dir>
	02/13/96 12:46p	514 CPY001_CPY.TXT
15	11/23/00 04:59p	270 Cpy000_CPY.TXT
	01/29/01 04:51p	3,444 Cpy002_CPY.TXT
	01/29/01 04:51p	5,685 Cpy003_CPY.TXT
	09/30/98 04:02p	4,059 Cpy004_CPY.TXT
	09/30/98 03:43p	4,799 Cpy005_CPY.TXT
20	10/06/00 02:21p	10,347 Libcdecb_CPY.TXT
	01/12/01 04:05p	16,444 cpyinv_CPY.TXT
	01/12/01 04:05p	786,094 libmsgcb_CPY.TXT
	01/12/01 04:05p	61,640 libreccb_CPY.TXT
	01/12/01 04:05p	54,510 libwstcb_CPY.TXT
25	Directory of D:\M-9	381 US\LXN
	01/31/01 03:27p	<dir></dir>
	01/31/01 03:31p	<dir></dir>
	01/29/01 10:37a	46,085 LX0A463_CBL.TXT
	01/29/01 10:37a	
30	01/29/01 10:37a	150,845 LX1A309_CBL.TXT
	01/29/01 10:37a	127,563 LX1E029_CBL.TXT
	01/29/01 10:37a	127,917 LX1E401_CBL.TXT
	01/29/01 10:37a	138,405 LX1E404_CBL.TXT

	01/29/01 10:37a	56,995 LX1E405_CBL.TXT
	01/29/01 10:37a	137,114 LX1E406_CBL.TXT
	01/29/01 10:37a	24,698 LX1E407_CBL.TXT
	01/29/01 10:37a	269,840 LX1E411_CBL.TXT
5	01/29/01 10:37a	33,630 LX1E440_CBL.TXT
	01/29/01 10:37a	48,859 LX1E441_CBL.TXT
	01/29/01 10:38a	36,024 LX1E442_CBL.TXT
	01/29/01 10:38a	36,868 LX1E443_CBL.TXT
	01/29/01 10:38a	23,375 LX1E444_CBL.TXT
10	01/29/01 10:38a	165,404 LX1E445_CBL.TXT
	01/29/01 10:38a	35,602 LX1E463_CBL.TXT
	01/29/01 10:38a	45,930 LX1R404_CBL.TXT
	01/29/01 10:38a	23,260 LX1R409_CBL.TXT
	01/29/01 10:38a	43,432 LX1R445_CBL.TXT
15	01/29/01 10:38a	21,443 LX2A305_CBL.TXT
	01/29/01 10:38a	21,443 LX2A309_CBL.TXT
	01/29/01 10:38a	81,672 LX2E029_CBL.TXT
	01/29/01 10:38a	81,527 LX2E401_CBL.TXT
	01/29/01 10:38a	97,096 LX2E404_CBL.TXT
20	01/29/01 10:38a	38,786 LX2E405_CBL.TXT
	01/29/01 10:38a	89,480 LX2E406_CBL.TXT
	01/29/01 10:38a	24,608 LX2E407_CBL.TXT
	01/29/01 10:38a	165,091 LX2E411_CBL.TXT
	01/29/01 10:38a	24,187 LX2E440_CBL.TXT
25	01/29/01 10:38a	73,667 LX2E441_CBL.TXT
	01/29/01 10:38a	27,125 LX2E442_CBL.TXT
	01/29/01 10:38a	26,856 LX2E443_CBL.TXT
	01/29/01 10:38a	20,100 LX2E444_CBL.TXT
	01/29/01 10:38a	110,268 LX2E445_CBL.TXT
30	01/29/01 10:38a	26,421 LX2E463_CBL.TXT
	01/29/01 10:38a	22,323 LX3A305_CBL.TXT
	01/29/01 10:38a	22,323 LX3A309_CBL.TXT
	01/29/01 10:38a	29,944 LX4A305_CBL.TXT

	690747 VI	
	01/29/01 10:38a	29,944 LX4A309_CBL.TXT
	01/29/01 10:38a	19,684 LX5A305_CBL.TXT
	01/29/01 10:38a	19,684 LX5A309_CBL.TXT
	Directory of D:\M-93	881 US\MFS
5	01/31/01 03:28p	<dir> .</dir>
	01/31/01 03:31p	<dir></dir>
	01/29/01 10:41a	222 ZABEND1_CBL.TXT
	01/29/01 10:41a	6,631 ZCALLSV_CBL.TXT
	01/29/01 10:41a	1,077 ZCBLERR_CBL.TXT
10	01/29/01 10:41a	4,857 ZCONECT_CBL.TXT
	01/29/01 10:41a	5,291 ZCRERPT_CBL.TXT
	01/29/01 10:41a	276 ZDEBUG1_CBL.TXT
	01/29/01 10:41a	393 ZDEBUG2_CBL.TXT
	01/29/01 10:41a	1,728 ZDISCON_CBL.TXT
15	01/29/01 10:41a	1,041 ZGETTXT_CBL.TXT
	01/29/01 10:41a	6,932 ZINIINP_CBL.TXT
	01/29/01 10:41a	891 ZINTJUL_CBL.TXT
	01/29/01 10:41a	2,153 ZINTTME_CBL.TXT
	01/29/01 10:41a	829 ZJULDAY_CBL.TXT
20	01/29/01 10:41a	624 ZJULDYN_CBL.TXT
	01/29/01 10:41a	1,479 ZJULSTM_CBL.TXT
	01/29/01 10:41a	1,562 ZJULTME_CBL.TXT
	01/29/01 10:41a	5,953 ZLEVENT_CBL.TXT
	01/29/01 10:41a	698 ZOLE001_CBL.TXT
25	01/29/01 10:41a	1,691 ZOLE002_CBL.TXT
	01/29/01 10:41a	696 ZOLE100_CBL.TXT
	01/29/01 10:41a	696 ZOLE101_CBL.TXT
	01/29/01 10:41a	696 ZOLE102_CBL.TXT
	01/29/01 10:41a	696 ZOLE103_CBL.TXT
30	01/29/01 10:41a	696 ZOLE104_CBL.TXT
	01/29/01 10:41a	696 ZOLE105_CBL.TXT
	01/29/01 10:41a	696 ZOLE106_CBL.TXT
	01/29/01 10:41a	696 ZOLE107_CBL.TXT

	01/29/01 10:41a	696 ZOLE108_CBL.TXT
	01/29/01 10:41a	696 ZOLE109_CBL.TXT
	01/29/01 10:41a	133,143 ZPREPRC_CBL.TXT
	01/29/01 10:41a	1,772 ZSQLERR_CBL.TXT
5	01/29/01 10:41a	1,198 ZTIME01_CBL.TXT
	01/29/01 10:41a	1,769 ZTJULDY_CBL.TXT
	01/29/01 10:41a	2,111 ZTMFTRN_CBL.TXT
	01/29/01 10:41a	1,090 ZTRG001_CBL.TXT
	01/29/01 10:41a	492 ZTRG002_CBL.TXT
10	Directory of D:\M-	9381 US\MSC
	01/31/01 03:30p	<dir> .</dir>
	01/31/01 03:31p	<dir></dir>
	01/29/01 12:25p	53,642 BMSC201_CBL.TXT
	01/29/01 12:25p	130,025 BMSC230_CBL.TXT
15	01/29/01 10:59a	977 BMSC230_CPY.TXT
	01/29/01 12:25p	133,301 BMSC262_CBL.TXT
	01/29/01 10:59a	982 BMSC262_CPY.TXT
	01/29/01 01:35p	113,486 BMSC263_CBL.TXT
	01/29/01 10:59a	330 BMSC263_CPY.TXT
20	01/29/01 12:25p	154,552 BMSC267_CBL.TXT
	01/29/01 10:59a	1,308 BMSC267_CPY.TXT
	01/29/01 12:25p	134,918 BMSC275_CBL.TXT
	01/29/01 10:59a	977 BMSC275_CPY.TXT
	01/29/01 12:26p	153,076 BMSC276_CBL.TXT
25	01/29/01 10:59a	1,305 BMSC276_CPY.TXT
	01/29/01 12:26p	106,890 BMSC300_CBL.TXT
	01/29/01 11:00a	330 BMSC300_CPY.TXT
	01/29/01 12:26p	104,861 BMSC301_CBL.TXT
	01/29/01 11:00a	330 BMSC301_CPY.TXT
30	01/29/01 12:37p	171,201 BMSC350_CBL.TXT
	01/29/01 11:00a	330 BMSC350_CPY.TXT
	01/29/01 12:26p	128,125 BMSC351_CBL.TXT
	01/29/01 11:00a	330 BMSC351_CPY.TXT

	01/29/01 12:26p	132,623 BMSC352_CBL.TXT
	01/29/01 11:00a	979 BMSC352_CPY.TXT
	01/29/01 12:26p	375,914 BMSC359_CBL.TXT
	01/29/01 11:00a	2,271 BMSC359_CPY.TXT
5	01/29/01 12:43p	171,267 BMSC360_CBL.TXT
	01/29/01 11:00a	330 BMSC360_CPY.TXT
	01/29/01 12:43p	143,913 BMSC370_CBL.TXT
	01/29/01 11:00a	330 BMSC370_CPY.TXT
	01/29/01 12:27p	130,614 BMSC373_CBL.TXT
10	01/29/01 11:00a	330 BMSC373_CPY.TXT
	01/29/01 12:27p	109,484 BMSC375_CBL.TXT
	01/29/01 11:00a	330 BMSC375_CPY.TXT
	01/29/01 12:27p	109,876 BMSC376_CBL.TXT
	01/29/01 11:00a	330 BMSC376_CPY.TXT
15	01/29/01 12:27p	131,522 BMSC382_CBL.TXT
	01/29/01 11:00a	330 BMSC382_CPY.TXT
	01/29/01 12:27p	134,514 BMSC383_CBL.TXT
	01/29/01 11:00a	330 BMSC383_CPY.TXT
	01/29/01 12:27p	124,580 BMSC385_CBL.TXT
20	01/29/01 11:00a	1,300 BMSC385_CPY.TXT
	01/29/01 12:27p	124,591 BMSC394_CBL.TXT
	01/29/01 11:00a	330 BMSC394_CPY.TXT
	01/29/01 12:15p	130,966 BMSC398_CBL.TXT
	01/29/01 11:00a	330 BMSC398_CPY.TXT
25	01/29/01 12:44p	124,467 BMSC518_CBL.TXT
	01/29/01 11:00a	330 BMSC518_CPY.TXT
	01/29/01 12:44p	111,287 BMSC592_CBL.TXT
	01/29/01 11:00a	330 BMSC592_CPY.TXT
	01/29/01 12:44p	193,976 BMSC602_CBL.TXT
30	01/29/01 11:00a	1,302 BMSC602_CPY.TXT
	01/29/01 12:44p	130,254 BMSC603_CBL.TXT
	01/29/01 11:00a	330 BMSC603_CPY.TXT
	01/29/01 12:14p	138,846 BMSC604_CBL.TXT

	01/29/01 11:01a	330 BMSC604_CPY.TXT
	01/29/01 12:28p	117,263 BMSC605_CBL.TXT
	01/29/01 11:01a	330 BMSC605_CPY.TXT
	01/29/01 12:27p	328,668 BMSC606_CBL.TXT
5	01/29/01 11:01a	330 BMSC606_CPY.TXT
	01/29/01 12:15p	101,418 BMSC607_CBL.TXT
	01/29/01 11:01a	330 BMSC607_CPY.TXT
	01/29/01 10:39a	73,803 IMSC301_CBL.TXT
	01/29/01 10:53a	46,777 IMSC301_CPY.TXT
10	01/29/01 10:39a	23,449 IMSC302_CBL.TXT
	01/29/01 10:53a	8,159 IMSC302_CPY.TXT
	01/29/01 10:39a	30,221 IMSC303_CBL.TXT
	01/29/01 10:53a	14,128 IMSC303_CPY.TXT
	01/29/01 10:39a	62,937 IMSC304_CBL.TXT
15	01/29/01 10:53a	40,417 IMSC304_CPY.TXT
	01/29/01 10:39a	35,204 IMSC305_CBL.TXT
	01/29/01 10:53a	18,042 IMSC305_CPY.TXT
	01/29/01 10:39a	42,240 IMSC306_CBL.TXT
	01/29/01 10:53a	27,845 IMSC306_CPY.TXT
20	01/29/01 10:39a	54,964 IMSC308_CBL.TXT
	01/29/01 10:53a	36,148 IMSC308_CPY.TXT
	01/29/01 10:39a	61,996 IMSC310_CBL.TXT
	01/29/01 10:53a	40,517 IMSC310_CPY.TXT
	01/29/01 04:44p	359,347 LMSC305_CBL.TXT
25	01/29/01 04:44p	359,429 LMSC309_CBL.TXT
	01/29/01 04:52p	210,026 LMSC350_CBL.TXT
	01/29/01 12:46p	114,054 LMSC351_CBL.TXT
	01/29/01 10:47a	2,610 LMSC351_CPY.TXT
	01/29/01 01:37p	101,195 LMSC360_CBL.TXT
30	01/29/01 12:37p	168,284 LMSC600_CBL.TXT
	01/29/01 04:44p	23,909 LMSC602_CBL.TXT
	01/29/01 12:37p	28,016 LMSC603_CBL.TXT
	01/29/01 12:38p	33,163 LMSC604_CBL.TXT

	01/29/01 12:38p	22,464 LMSC605_CBL.TXT
	01/29/01 12:38p	21,301 LMSC606_CBL.TXT
	01/29/01 12:38p	144,338 LMSC607_CBL.TXT
	01/29/01 04:44p	111,911 RMSC301m.TXT
5	01/29/01 04:44p	47,627 RMSC302m.TXT
	01/29/01 04:44p	65,115 RMSC303m.TXT
	01/29/01 04:44p	88,736 RMSC304m.TXT
	01/29/01 04:35p	59,224 RMSC305m.TXT
	01/29/01 04:44p	68,814 RMSC306m.TXT
10	01/29/01 04:44p	97,072 RMSC308m.TXT
	01/29/01 12:38p	223,681 SMSC301_CBL.TXT
	01/29/01 10:58a	675 SMSC301_CPY.TXT
	01/29/01 12:38p	89,057 SMSC302_CBL.TXT
	01/29/01 10:58a	675 SMSC302_CPY.TXT
15	01/29/01 04:44p	129,411 SMSC303_CBL.TXT
	01/29/01 12:38p	250,088 SMSC304_CBL.TXT
	01/29/01 10:59a	672 SMSC304_CPY.TXT
	01/29/01 04:44p	57,109 SMSC305_CBL.TXT
	01/29/01 12:38p	197,292 SMSC306_CBL.TXT
20	01/29/01 12:38p	284,622 SMSC308_CBL.TXT
	01/29/01 10:59a	1,641 SMSC308_CPY.TXT
	01/29/01 04:44p	57,109 SMSC309_CBL.TXT
	01/29/01 12:38p	147,371 SMSC310_CBL.TXT
	01/29/01 10:59a	996 SMSC310_CPY.TXT
25	Directory of D:\M-9	9381 US\SCRIPTS
	01/31/01 03:30p	<dir></dir>
	01/31/01 03:31p	<dir></dir>
	11/28/00 11:44a	14,383 Fstdev_SCP.TXT
	01/29/01 10:35a	275,599 LNT_DEMO_SCP.TXT
30	01/29/01 10:35a	83,059 LNT_OPS_SCP.TXT
	01/29/01 10:35a	67,790 LNT_USER_SCP.TXT
	01/29/01 10:35a	149,283 Lnt_advanced_SCP.TXT
	01/29/01 10:35a	280,531 Lnt_regntest_SCP.TXT

	01/29/01 10:35a	46,95	7 Lnt_security_SCP.TXT
	01/29/01 10:35a	285,10	04 Lnt_super_SCP.TXT
	01/29/01 10:35a	15,89	7 NSK_OPS_SCP.TXT
	01/29/01 10:35a	9,682	2 NSK_USER_SCP.TXT
5	01/29/01 10:35a	35,94	4 Nsk_advanced_SCP.TXT
	01/29/01 10:35a	53,92	1 Nsk_regntest_SCP.TXT
	01/29/01 10:35a	4,024	4 Nsk_security_SCP.TXT
	01/29/01 10:35a	56,19	6 Nsk_super_SCP.TXT
	10/24/00 08:24a	43,34	5 Pccase_SCP.TXT
10	01/29/01 10:35a	85,21	4 RNT_OPS_SCP.TXT
	01/29/01 10:35a	69,86	66 RNT_USER_SCP.TXT
	01/29/01 10:35a	151,5	10 Rnt_advanced_SCP.TXT
	01/29/01 10:35a	282,8	53 Rnt_regntest_SCP.TXT
	01/29/01 10:35a	49,01	0 Rnt_security_SCP.TXT
15	01/29/01 10:35a	287,42	25 Rnt_super_SCP.TXT
	Directory of D:\M-9	381 US\SQ	L
	01/31/01 03:31p	<dir></dir>	
	01/31/01 03:31p	<dir></dir>	
	11/24/00 06:24p	3,61	6 Currency_Ref_Integ_Check_Execs_sql.txt
20	05/13/99 05:12p	993	Relate_Markets_To_Std_PriceHdrs_sql.txt
	05/13/99 02:38p	2,29	7 Service_Ref_Integ_Check_Execs_sql.txt
	12/22/00 10:18a	114,7	58 create_all_procs_sql.txt
	01/11/01 03:57p	302,5	36 create_all_tables_sql.txt
	Directory of D:\M-9	381 US\WE	EBAPP
25	01/31/01 03:35p	<dir></dir>	
	01/31/01 03:31p	<dir></dir>	
	01/31/01 03:33p	<dir></dir>	FUNCS
	04/30/99 05:38p	1,58	2 Fstgwy_asp.txt
	01/31/01 03:33p	<dir></dir>	GENERAL
30	06/13/00 01:33p	972	2 Index_htm.txt
	01/31/01 03:33p	<dir></dir>	SCRIPTS
	01/31/01 03:34p	<dir></dir>	SCRNS
	01/31/01 03:35p	<dir></dir>	STYLES

	Directory of D:\M-93	81 US\WEBAPP\FUNCS
	01/31/01 03:33p	<dir> .</dir>
	01/31/01 03:35p	<dir></dir>
	01/29/01 11:20a	836 FUNC001_ASP.TXT
5	01/29/01 11:20a	966 FUNC012_ASP.TXT
	01/29/01 11:20a	845 FUNC014_ASP.TXT
	01/29/01 11:20a	955 FUNC016_ASP.TXT
	01/29/01 11:20a	955 FUNC017_ASP.TXT
	01/29/01 11:20a	855 FUNC019_ASP.TXT
10	01/29/01 11:20a	958 FUNC020_ASP.TXT
	01/29/01 11:20a	964 FUNC022_ASP.TXT
	01/29/01 11:20a	951 FUNC023_ASP.TXT
	01/29/01 11:20a	961 FUNC024_ASP.TXT
	01/29/01 11:20a	954 FUNC025_ASP.TXT
15	01/29/01 11:20a	962 FUNC026_ASP.TXT
	01/29/01 11:20a	960 FUNC028_ASP.TXT
	01/29/01 11:20a	963 FUNC050_ASP.TXT
	01/29/01 11:20a	859 FUNC053_ASP.TXT
	01/29/01 11:20a	969 FUNC054_ASP.TXT
20	01/29/01 11:20a	843 FUNC055_ASP.TXT
	01/29/01 11:20a	854 FUNC056_ASP.TXT
	01/29/01 11:20a	966 FUNC057_ASP.TXT
	01/29/01 11:20a	965 FUNC070_ASP.TXT
	01/29/01 11:20a	965 FUNC071_ASP.TXT
25	01/29/01 11:20a	973 FUNC072_ASP.TXT
	01/29/01 11:20a	973 FUNC073_ASP.TXT
	01/29/01 11:20a	970 FUNC074_ASP.TXT
	01/29/01 11:20a	968 FUNC075_ASP.TXT
	01/29/01 11:20a	964 FUNC076_ASP.TXT
30	01/29/01 11:20a	974 FUNC077_ASP.TXT
	01/29/01 11:20a	977 FUNC078_ASP.TXT
	01/29/01 11:20a	976 FUNC079_ASP.TXT
	01/29/01 11:20a	954 FUNC103_ASP.TXT

	090747 VI		
	01/29/01	11:20a	960 FUNC104_ASP.TXT
	01/29/01	11:20a	953 FUNC106_ASP.TXT
	01/29/01	11:20a	951 FUNC107_ASP.TXT
	01/29/01	11:20a	949 FUNC114_ASP.TXT
5	01/29/01	11:20a	962 FUNC115_ASP.TXT
	01/29/01	11:20a	952 FUNC116_ASP.TXT
	01/29/01	11:20a	953 FUNC117_ASP.TXT
	01/29/01	11:20a	852 FUNC118_ASP.TXT
	01/29/01	11:20a	964 FUNC121_ASP.TXT
10	01/29/01	11:20a	970 FUNC122_ASP.TXT
	01/29/01	11:20a	963 FUNC123_ASP.TXT
	01/29/01	11:20a	961 FUNC124_ASP.TXT
	01/29/01	11:20a	959 FUNC126_ASP.TXT
	01/29/01	11:20a	972 FUNC127_ASP.TXT
15	01/29/01	11:20a	962 FUNC128_ASP.TXT
	01/29/01	11:20a	963 FUNC129_ASP.TXT
	01/29/01	11:20a	971 FUNC191_ASP.TXT
	01/29/01	11:20a	967 FUNC192_ASP.TXT
	01/29/01	11:20a	972 FUNC193_ASP.TXT
20	01/29/01	11:20a	967 FUNC194_ASP.TXT
	01/29/01	11:20a	977 FUNC195_ASP.TXT
	09/28/00	10:23a	847 FUNC310_ASP.TXT
	01/29/01	11:20a	861 FUNC702_ASP.TXT
	01/29/01	11:20a	867 FUNC703_ASP.TXT
25	01/29/01	11:20a	859 FUNC704_ASP.TXT
	01/29/01	11:20a	953 FUNC706_ASP.TXT
	01/29/01	11:20a	969 FUNC707_ASP.TXT
	01/29/01	11:20a	847 FUNC708_ASP.TXT
	01/29/01	11:20a	849 FUNC709_ASP.TXT
30	01/29/01	11:20a	852 FUNC710_ASP.TXT
		11:20a	846 FUNC711_ASP.TXT
	01/29/01	11:20a	969 FUNC712_ASP.TXT
	01/29/01	11:20a	957 FUNC713_ASP.TXT

	01/29/01	11:20a	967 FUNC714_ASP.TXT
	01/29/01	11:20a	957 FUNC715_ASP.TXT
	01/29/01	11:20a	977 FUNC722_ASP.TXT
	01/29/01	11:20a	963 FUNC723_ASP.TXT
5	01/29/01	11:20a	977 FUNC724_ASP.TXT
	01/29/01	11:20a	966 FUNC725_ASP.TXT
	01/29/01	11:20a	968 FUNC726_ASP.TXT
	01/29/01	11:20a	971 FUNC727_ASP.TXT
	01/29/01	11:20a	978 FUNC729_ASP.TXT
10	01/29/01	11:20a	965 FUNC730_ASP.TXT
	01/29/01	11:20a	971 FUNC731_ASP.TXT
	01/29/01	11:20a	967 FUNC732_ASP.TXT
	01/29/01	11:20a	964 FUNC733_ASP.TXT
	01/29/01	11:20a	967 FUNC734_ASP.TXT
15	01/29/01	11:20a	862 FUNC741_ASP.TXT
	01/29/01	11:20a	868 FUNC742_ASP.TXT
	01/29/01	11:20a	858 FUNC743_ASP.TXT
	01/29/01	11:20a	860 FUNC744_ASP.TXT
	01/29/01	11:20a	863 FUNC745_ASP.TXT
20	01/29/01	11:20a	860 FUNC746_ASP.TXT
	01/29/01	11:20a	866 FUNC747_ASP.TXT
	01/29/01	11:20a	856 FUNC748_ASP.TXT
	01/29/01	11:20a	858 FUNC749_ASP.TXT
	01/29/01	11:20a	861 FUNC750_ASP.TXT
25	01/29/01	11:20a	861 FUNC751_ASP.TXT
	01/29/01	11:20a	857 FUNC752_ASP.TXT
	01/29/01	11:20a	858 FUNC753_ASP.TXT
	01/29/01	11:20a	856 FUNC754_ASP.TXT
	01/29/01	11:20a	857 FUNC755_ASP.TXT
30	01/29/01	11:20a	846 FUNC764_ASP.TXT
	01/29/01	11:20a	846 FUNC765_ASP.TXT
	01/29/01	11:20a	848 FUNC766_ASP.TXT
	01/29/01	11:20a	866 FUNC801_ASP.TXT

	01/29/01 11:20a	869 FUNC802_ASP.TXT
	01/29/01 11:20a	869 FUNC803_ASP.TXT
	01/29/01 11:20a	861 FUNC804_ASP.TXT
	01/29/01 11:20a	864 FUNC805_ASP.TXT
5	01/29/01 11:20a	868 FUNC806_ASP.TXT
	01/29/01 11:20a	867 FUNC807_ASP.TXT
	01/29/01 11:20a	859 FUNC808_ASP.TXT
	01/29/01 11:20a	975 FUNC809_ASP.TXT
	01/29/01 11:20a	978 FUNC810_ASP.TXT
10	01/29/01 11:20a	978 FUNC811_ASP.TXT
	01/29/01 11:20a	969 FUNC812_ASP.TXT
	01/29/01 11:20a	970 FUNC813_ASP.TXT
	01/29/01 11:20a	865 FUNC814_ASP.TXT
	01/29/01 11:20a	867 FUNC815_ASP.TXT
15	01/29/01 11:20a	862 FUNC816_ASP.TXT
	01/29/01 11:20a	869 FUNC817_ASP.TXT
	01/29/01 11:20a	868 FUNC818_ASP.TXT
	01/29/01 11:20a	859 FUNC819_ASP.TXT
	01/29/01 11:20a	860 FUNC820_ASP.TXT
20	01/29/01 11:20a	961 FUNC899_ASP.TXT
	Directory of D:\M-9	9381 US\WEBAPP\GENERAL
	01/31/01 03:33p	<dir> .</dir>
	01/31/01 03:35p	<dir></dir>
	06/17/99 02:09p	5,428 Implicit_asp.txt
25	06/15/99 01:47p	532 LGNERR_asp.txt
	05/19/00 03:56p	11,056 Splash_asp.txt
	05/18/00 12:37p	4,554 copyright_htm.txt
	12/05/00 06:38p	15,911 counter_htm.txt
	05/19/00 11:25a	1,798 intranetdenied_htm.txt
30	12/05/00 05:13p	4,059 intranethomepage_asp.txt
	05/19/00 11:25a	1,913 intranetieonly_htm.txt
	07/06/00 02:24p	3,764 logon_asp.txt
	01/29/01 11:20a	16,715 menu_asp.txt

	05/08/00 02:59p	2,621 preload_htm.txt
	Directory of D:\M-9	9381 US\WEBAPP\SCRIPTS
	01/31/01 03:33p	<dir> .</dir>
	01/31/01 03:35p	<dir></dir>
5	11/20/00 11:43a	6,937 DTL01_SCP.TXT
	11/20/00 01:29p	27,297 DTL02_SCP.TXT
	06/22/99 11:23a	5,381 DTL03_SCP.TXT
	09/18/00 03:28p	210 DTL11_SCP.TXT
	09/29/00 11:02a	6,528 DTL12_SCP.TXT
10	10/12/00 05:03p	10,462 DTL21_INC.TXT
	07/30/99 10:37a	577 access_inc.txt
	10/12/00 02:02p	536 applid_js.txt
	10/12/00 02:02p	525 applid_scp.txt
	06/22/99 10:41a	852 brzlib_js.txt
15	03/26/99 03:59p	400 dtlmnu_scp.txt
	01/29/01 11:20a	19,869 function_scp.txt
	06/15/99 01:51p	4,389 general_scp.txt
	06/24/99 10:46p	620 ietest_inc.txt
	01/29/01 11:20a	2,087 implicit_scp.txt
20	07/06/00 09:17a	4,815 intranetlogon_inc.txt
	10/05/00 10:26a	1,005 intranetlogon_lst.txt
	06/15/99 01:52p	206 parkingspot_scp.txt
	06/07/99 10:29a	318 preload_scp.txt
	Directory of D:\M-9	9381 US\WEBAPP\SCRNS
25	01/31/01 03:34p	<dir> .</dir>
	01/31/01 03:35p	<dir></dir>
	01/29/01 11:20a	2,258 scrn000_HTM.TXT
	01/29/01 11:20a	4,135 scrn001_HTM.TXT
	01/29/01 11:20a	6,757 scrn002_HTM.TXT
30	01/29/01 11:20a	7,939 scm007_HTM.TXT
	01/29/01 11:20a	52,553 scrn011_HTM.TXT
	01/29/01 11:20a	12,476 scrn012_HTM.TXT
	01/29/01 11:20a	17,576 scm013_HTM.TXT

	01/29/01	11:20a	20,842 scm016_HTM.TXT
	01/29/01	11:20a	21,439 scm017_HTM.TXT
	01/29/01	11:20a	10,351 scm018_HTM.TXT
	01/29/01	11:20a	18,712 scm019_HTM.TXT
5	01/29/01	11:20a	12,248 scrn020_HTM.TXT
	01/29/01	11:20a	10,854 scm021_HTM.TXT
	01/29/01	11:20a	10,674 scm023_HTM.TXT
	01/29/01	11:20a	32,207 scrn025_HTM.TXT
	01/29/01	11:20a	10,632 scrn028_HTM.TXT
10	01/29/01	11:20a	2,009 scm033_HTM.TXT
	01/29/01	11:20a	24,463 scrn050_HTM.TXT
	01/29/01	11:20a	21,983 scm051_HTM.TXT
	01/29/01	11:20a	16,599 scrn052_HTM.TXT
	01/29/01	11:20a	28,906 scrn053_HTM.TXT
15	01/29/01	11:20a	17,165 scrn054_HTM.TXT
	01/29/01	11:20a	25,259 scrn055_HTM.TXT
	01/29/01	11:20a	35,997 scrn056_HTM.TXT
	01/29/01	11:20a	16,983 scrn057_HTM.TXT
	01/29/01	11:20a	35,344 scrn058_HTM.TXT
20	01/29/01	11:20a	35,295 scrn059_HTM.TXT
	01/29/01	11:20a	27,793 scrn100_HTM.TXT
	01/29/01	11:20a	13,821 scrn101_HTM.TXT
	01/29/01	11:20a	15,876 scrn102_HTM.TXT
	01/29/01	11:20a	102,399 scrn103_HTM.TXT
25	01/29/01	11:20a	13,165 scrn104_HTM.TXT
	01/29/01	11:20a	24,506 scrn106_HTM.TXT
	01/29/01	11:20a	12,292 scrn111_HTM.TXT
	01/29/01	11:20a	15,028 scrn112_HTM.TXT
	01/29/01	11:20a	17,741 scrn140_HTM.TXT
30	01/29/01	11:20a	9,836 scrn141_HTM.TXT
	01/29/01	11:20a	40,463 scrn142_HTM.TXT
	01/29/01	11:20a	13,301 scrn143_HTM.TXT
	01/29/01	11:20a	9,975 scrn186_HTM.TXT

	01/29/01 11:20a	20,287 scrn190_HTM.TXT
	01/29/01 11:20a	22,630 scrn191_HTM.TXT
	01/29/01 11:20a	36,172 scrn192_HTM.TXT
	01/29/01 11:20a	118,630 scrn193_HTM.TXT
5	01/29/01 11:20a	20,610 scm194_HTM.TXT
	01/29/01 11:20a	42,586 scm196_HTM.TXT
	01/29/01 11:20a	31,063 scm199_HTM.TXT
	01/29/01 11:20a	42,613 scm301_HTM.TXT
	01/29/01 11:20a	5,059 scrn302_HTM.TXT
10	01/29/01 11:20a	15,551 scrn303_HTM.TXT
	01/29/01 11:20a	51,827 scrn304_HTM.TXT
	01/29/01 11:20a	24,470 scm305_HTM.TXT
	01/29/01 11:20a	27,070 scrn306_HTM.TXT
	01/29/01 11:20a	46,332 scrn308_HTM.TXT
15	01/29/01 11:20a	53,218 scrn310_HTM.TXT
	01/29/01 11:20a	30,568 scrn701_HTM.TXT
	01/29/01 11:20a	45,497 scrn702_HTM.TXT
	01/29/01 11:20a	19,933 scrn703_HTM.TXT
	01/29/01 11:20a	39,375 scrn704_HTM.TXT
20	01/29/01 11:20a	16,408 scrn705_HTM.TXT
	01/29/01 11:20a	27,433 scrn706_HTM.TXT
	01/29/01 11:20a	21,786 scrn707_HTM.TXT
	01/29/01 11:20a	36,503 scm708_HTM.TXT
	01/29/01 11:20a	29,499 scm709_HTM.TXT
25	01/29/01 11:20a	44,583 scm710_HTM.TXT
	01/29/01 11:20a	18,586 scm711_HTM.TXT
	01/29/01 11:20a	36,156 scrn712_HTM.TXT
	01/29/01 11:20a	23,476 scm713_HTM.TXT
	01/29/01 11:20a	47,967 scrn714_HTM.TXT
30	01/29/01 11:20a	10,842 scm717_HTM.TXT
	01/29/01 11:20a	39,203 scm718_HTM.TXT
	01/29/01 11:20a	49,165 scrn723_HTM.TXT
	01/29/01 11:20a	51,030 scrn724_HTM.TXT

	01/29/01	11:20a	26,40	5 scrn727_HTM.TXT
	01/29/01	11:20a	55,91	4 scrn728_HTM.TXT
	01/29/01	11:20a	49,67	0 scrn729_HTM.TXT
	01/29/01	11:20a	50,60	1 scrn730_HTM.TXT
5	01/29/01	11:20a	24,11	8 scrn731_HTM.TXT
	01/29/01	11:20a	40,24	7 scrn732_HTM.TXT
	01/29/01	11:20a	2,858	scm901_HTM.TXT
	01/29/01	11:20a	4,185	scrn903_HTM.TXT
	01/29/01	11:20a	31,78	8 scm999_HTM.TXT
10	Directory	of D:\M-93	81 US\WE	BAPP\STYLES
	01/31/01	03:35p	<dir></dir>	
	01/31/01	03:35p	<dir></dir>	••
	04/12/99	12:09p	332	props_css.txt
	06/22/99	11:19a	844	scrns_css.txt
15	Total File	s Listed:		
	86	66 File(s)	41,467,133	bytes

The contents of the compact disk are a part of the present disclosure, and are incorporated by reference herein in their entireties.

20 COPYRIGHT NOTICE

A portion of the disclosure of this patent document contains material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyright rights whatsoever.

BACKGROUND

Field

25

The present invention relates generally to pricing systems and, in particular, to a system and method of real-time pricing.

Description of the Related Art

10

15

20

25

30

Many products and services are commodities that are sold in very competitive markets. New competition can also come, for example, from product and service improvements, new products, new services, lower prices, new technology, the use of the Internet, mergers, and acquisitions. Pricing is often a major factor in a customer's decision as to what product or service to purchase or use. In many markets, the capability to manage pricing strategies better than the competition can be the competitive advantage that is needed to succeed in the competitive market.

Many different pricing strategies have been developed by companies to gain a competitive advantage over the competition. One such strategy employed by companies is "volume discounting." Companies provide volume discounts to influence consumers to purchase its products and services. Volume discounting affords the benefits of a large number or quantity of purchases, typically within a set period of time (e.g., a billing cycle). A consumer benefits from his or her prior purchases in that all the purchases in a billing cycle are considered in applying the volume discount.

Because the total volume of products or services purchased by a consumer is not known until the end of a billing cycle, the volume discount, and as a result, the actual price of the product or service as it applies to the consumer, cannot be determined until the end of a billing cycle. Thus, even though pricing may be a major or deciding factor in a consumer's decision, currently, the benefit afforded by volume discounting is determined at the end of a billing cycle. At the time the consumer considers making a product or service purchase, the consumer is provided a price that fails to account for volume discounting and, as a result, is likely higher than the price the consumer might end up paying.

Thus, the consumer is likely to base his or her purchasing decision on an incorrect price, such as, by way of example, a unit price (e.g., a price that does not take into consideration volume discounting). A company can benefit greatly by being able to provide a price that is closer to the actual price the consumer is likely to pay after accounting for the volume discounts, especially if it is a lower price. Therefore, what is needed is an infrastructure that enables a company to manage its pricing strategies and to provide a price that is more indicative of the price the consumer will ultimately pay.

SUMMARY

The present disclosure is directed to a system and corresponding methods that facilitate the calculation of a real-time price for a transaction during a billing cycle that accounts for volume discounts resulting from transactions that occurred previously during the billing cycle. A data processing system maintains a record of the transactions that occur during a billing cycle. The data processing system then calculates a real-time price quote for the transaction by applying volume discounts resulting from the transactions that previously occurred during the billing cycle.

For purposes of summarizing the invention, certain aspects, advantages, and novel features of the invention have been described herein. It is to be understood that not necessarily all such advantages may be achieved in accordance with any one particular embodiment of the invention. Thus, the invention may be embodied or carried out in a manner that achieves or optimizes one advantage or group of advantages as taught herein without necessarily achieving other advantages as may be taught or suggested herein.

15

20

25

10

5

In one embodiment, a method for pricing transactions in real-time includes: receiving a request for a real-time price quote for a transaction from a first account, the request being received at a first instance in time during a billing cycle; determining a first production service, the first production service being a component of the transaction; determining a count of first production service instances representing the first production service in the received transaction; determining a billable entity for the transaction, the billable entity comprising one or more related accounts, wherein the related accounts includes the first account; determining a total of the first production service instances purchased by the related accounts during the billing cycle up to the first instance in time, the total including the count of the first production service instances in the received transaction; determining a price applicable to the total of the first production service instances based on a pricing method; and apportioning the price to the received transaction based on the count of the first production service instance in the received transaction based on the count of the first production service instance in the received transaction.

In another embodiment, a method for real-time pricing includes: receiving a request for a real-time price quote for a transaction, the request being received at a first instance in time during a billing cycle, wherein the transaction comprises a number of first production service instances, each first production service instance representing a first production service; determining a total count of production service instances

10

15

20

30

consumed during the billing cycle up to the first instance in time based on a pricing relationship; determining a billing service appropriate for the first production service; calculating a price for the first production service from a price table based on a first attribute for the billing service and the total count of production service instances consumed; and apportioning the price to the received transaction based on the number of first production service instances in the transaction.

In still another embodiment, a computer-readable storage medium has stored thereon computer instructions that, when executed by a computer, cause the computer to: receive a request for a real-time price quote for a transaction, the request being received at a first instance in time during a billing cycle, wherein the transaction comprises a number of first production service instances, each instance representing a first production service; determine a total count of production service instances consumed during the billing cycle up to the first instance in time based on a pricing relationship; determine a billing service appropriate for the first production service; calculate a price for the first production service from a price table based on a first attribute for the billing service and the total count of production service instances consumed; and apportion the price to the received transaction based on the number of first production service instances in the transaction.

These and other embodiments of the present invention will also become readily apparent to those skilled in the art from the following detailed description of the embodiments having reference to the attached figures, the invention not being limited to any particular embodiment(s) disclosed.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a flow chart of an exemplary method for calculating a realtime price with volume discounting.

Figure 2 illustrates a flow chart of an exemplary method for calculating a variance to a real-time price with volume discounting.

DETAILED DESCRIPTION

According to this invention, certain limitations imposed by conventional pricing systems have been overcome.

10

15

20

25

30

A data processing system and corresponding methods, according to an embodiment of the present invention, facilitates a real-time pricing of a transaction with volume discounting. "Transaction" here generally refers to a product or service that is offered by a provider (e.g., manufacturer, retailer, wholesaler, distributor, service provider, etc.) for consumption by one or more consumers. In one embodiment, the provider may be the operator of the data processing system. In another embodiment, the provider may purchase the services offered by the data processing system as disclosed herein from the operator or administrator of the data processing system (e.g., the provider of the transaction is different from the provider of the data processing system services).

In one embodiment, the data processing system receives during a billing cycle a request for a real-time price quote for a transaction from, for example, an account. The account may be a consumer of the transaction. The billing cycle specifies a time duration (e.g., day, week, month, quarter, year), at the end of which the account is billed for the transactions consumed or purchased during the billing cycle.

The data processing system analyzes the transaction to determine the transaction's various components. The transaction provider may define the components of the transaction. The conversion of the transaction into its components allows the transaction provider to determine the cost of the transaction, in component parts, which in turn, enable the transaction provider to determine an appropriate price for the transaction. A suitable database system for implementing the transaction analysis in accordance with the present invention is described in U.S. Pat. No. 6,052,672, entitled "DATA PROCESSING SYSTEM FOR COMPLEX PRICING AND TRANSACTIONAL ANALYSIS," which is hereby incorporated by reference in its entirety. However, other database systems can be used to implement a data processing system using the principles described herein.

In one embodiment, the data processing system calculates a real-time price for the transaction during a billing cycle as if it was the end of the billing cycle. The data processing system breaks down the transaction into its component parts. The component parts are then priced by applying a volume discount applicable to each component to determine a real-time price for each component. The data processing system then totals the real-time price of the components to determine the real-time price of the transaction.

The volume discount for a component may result from pricing relationships between parties (e.g., relationships between a number of components, accounts, customers, etc.) and the prior purchases of the component during the billing cycle up to

10

15

20

25

30

this time by the parties in the pricing relationship. The data processing system applies the volume discount applicable to a component to determine the price of the component. Thus, the data processing system applies all the relationship pricing and volume discounting known during the billing cycle up to the time when it received the request for quote to determine the real-time price of the transaction.

In another embodiment, the data processing system calculates a variance to the real-time transaction price. At the end of the billing cycle, the data processing system calculates a price for each transaction purchased during the billing cycle. In one embodiment, the data processing system calculates a price for the transaction by determining a price for each component of a transaction in the manner outlined above. This price is then compared to the real-time price quoted during the billing cycle (e.g., at the time the request for real-time price quote is received). If there is a variance or difference between the two prices, the data processing system may make or report adjustments as necessary. For example, there may have been subsequent purchases of a component of the transaction after the time of providing the real-time price quote. The subsequent purchases of the component may result in a larger volume discount, which, in turn, causes a variance in price (e.g., results in a lower price for the transaction).

Even though this invention is suitable to providing real-time pricing of various products and services in many industries (e.g., financial services, internet services, telecommunication services, etc.), the invention will be further disclosed in the context of the data processing system providing real-time pricing with volume discounting of financial products offered by a financial services company (FSC), such as, retail bank, wholesale bank, corporate bank, and investment bank.

Embodiments of the present invention are understood by referring to Figures 1-2 of the drawings. Throughout the drawings, components that correspond to components shown in previous figures are indicated using the same reference numbers.

The detailed description that follows is presented in terms of processes and symbolic representations of operations performed by conventional computers.

Transaction Overview

A transaction instance (e.g., financial transaction instance) takes place when a FSC provides a financial service and when a client or consumer purchases or consumes

10

15

20

25

30

the financial service. For example, an FSC may provide one or more financial services that are bundled together and offered to clients as financial transactions. Examples of financial transactions are checking accounts, cash management accounts, mortgages, funds transfers, safe deposit boxes, and the like.

In one embodiment, an FSC can use the data processing system to provide a real-time pricing of one or more financial transactions. Each financial transaction is defined in the data processing system in its component parts called production services. Thus, a financial transaction is related to the production services that map to or make up the financial transaction. The production services defining a particular financial transaction are the individual actions that the FSC performs or that the FSC wishes to account for in performing or processing the financial transaction. Production services for a financial transaction may include, by way of example, debit from an account, credit to an account, over draft approval, and computer connection. Production services are akin to a bill of materials for a manufacturer in that each transaction can be defined by the production services that are required to build or provide that transaction.

For clarity, the language of U.S. Pat. No. 6,052,672 is used herein. In particular, to distinguish an actual occurrence of a financial transaction performed by an FSC from a representation of the financial transaction in the data processing system, the actual occurrence of the financial transaction will be referred to as a financial transaction instance. Similarly, a production service instance is the representation of an actual occurrence of a specific production service performed by the FSC.

A production service is further defined in the data processing system in its component parts called billing or billable services. Billing services and billable service are used interchangeably herein. The billable services are related to activities having a cost or price, enabling the FSC to determine the cost of providing the financial transaction and the fees or prices the FSC is going to derive, earn, or charge the consumer (e.g., account) of the transaction. In one embodiment, the billable services are what appear on an accounting statement sent to the consumer. Thus, the consumer is informed of the transactions consumed, the related production services consumed, the related billable services consumed, and the price charged for each of the billable services.

A billable service may be mapped to one or more price tables in the data processing system. The cost and/or price associated with a billable service is recorded in a price table. The price table includes pricing rules for the associated billable service.

10

15

20

25

30

The data processing system maintains records for one or more billable entities. "Billable entity" here generally refers to a grouping of accounts for the purpose of applying volume discounting. Volume discounting may span the activity of the accounts within the billable entity. An account may be thought of as the consumer of the transaction. For example, a customer may actually be many companies or related companies that may be transacting with the FSC on one or more accounts. The billable entity is a composition of the accounts without regard to who the customers are, or whether one customer is involved or more than one customers are involved. Thus, volume discounting may span the activity of the accounts within a particular billable entity without regard to who the actual customers are or the number of customers involved in the billable entity.

In one embodiment, the data processing system provides for relationship pricing in conjunction with volume discounting. A pricing relationship may exist between a number of billable services, accounts, customers, and the like. For relationship pricing, the billable services, accounts, or customers in a relationship are factored in calculating a real-time price for a transaction. Relationship pricing in conjunction with volume discounting is an application of the volume discount based on the activities of the elements (i.e., billable services, accounts, customers) in a particular pricing relationship.

For example, as explained above, a group of accounts may be grouped together in a billable entity, creating a pricing relationship for the purposes of applying a volume discount. In another example, a group of billable services may be grouped together, creating a pricing relationship for the purposes of applying a volume discount. The volume discount is determined from the activity of the billable services within the group across all accounts in a particular billing entity. In still another example, a pricing relationship can exist for a group of accounts (e.g., not a complete billing entity) for a particular billable service. The volume discount is determined from the activity of the particular billing service across the group of accounts.

Billable services, pricing of billable services, pricing relationships, and relationship pricing is further described in U.S. Pat. No. 6,052,672. Pricing methods, including volume discounting is further described in the co-pending and commonly owned U.S. Pat. application Serial No. 09/183/335 entitled "DATA PROCESSING SYSTEM FOR PRICING, COSTING AND BILLING OF FINANCIAL TRANSACTIONS."

10

15

20

25

Method for Calculating a Real-Time Price with Volume Discounting

In one embodiment, the data processing system facilitates the calculation of a real-time price for a financial transaction with volume discounting at any time in a billing cycle. The data processing system contains data and program logic to receive a request to provide a real-time price quote for a financial transaction and calculates a real-time price that includes applicable volume discounts. The data processing system calculates the real-time price for the financial transaction irrespective of point in time within a particular billing cycle. The volume discounting is determined from pricing relationships provided by the data processing system.

Figure 1 illustrates a flow chart of an exemplary method 100 for calculating a real-time price of a financial transaction with volume discounting. Beginning at a start step 102, an FSC creates and defines the financial transactions and the mapping rules for the transactions, including the production services and the billing services, as maintained in the data processing system. The FSC also creates and defines the billing entities, accounts, pricing relationships, etc. maintained in the data processing system.

For example, the FSC defines a "wire transfer" as one financial transaction. The wire transfer is mapped to include three production services: "debit from account," "credit to account," and "overdraft protection." Each of the production services is mapped to a respective billable service, and each billable service is respectively mapped to a price table. The FSC may create a billing entity to include four accounts: "Account A," "Account B," "Account C," and "Account D." Accounts A and B belong to Company ABC, and Accounts C and D belong to Company XYZ. The FSC sets a monthly billing cycle for the billing entity.

Furthermore, the FSC may agree to and create a pricing relationship for Accounts A, B, and C for the overdraft protection service. The pricing relationship entitles Accounts A, B, and C to the following volume discounting for the overdraft protection service:

	Quantity 1 to 20	\$4.00/each
30	Quantity 21 to 50	\$3.00/each
	Quantity 51 to 100	\$2.00/each
	Ouantity 100+	\$1.00/each

10

15

20

25

30

Thus, if the combined volume of overdraft protections used or purchased by the group of accounts in the pricing relationship (Accounts A, B, and C) exceed twenty, all the volume of overdraft protections purchased is priced at \$3.00 each. Likewise, if the combined volume of overdraft protections purchased by the group of accounts in the pricing relationship exceed fifty or one hundred, all the volume of overdraft protections purchased is priced at \$2.00 each or \$1.00 each, respectively. Otherwise, the first twenty overdraft protections are priced at \$4.00 each.

At step 104, the FSC receives a request for a real-time price quote for a financial transaction from a customer. Typically, the customer establishes one or more accounts with the FSC, and specifies a particular account in requesting the real-time quote for the financial transaction. In particular, the financial transaction data and the request for the real-time price quote is input into, and received by the data processing system. Continuing the wire transfer example, Company ABC, using Account A, may request a real-time price quote for a wire transfer. The request may have been submitted during a billing cycle, for example, the tenth day of the month.

At step 106, the data processing system performs transaction analysis on the financial transaction to determine the associated production services. In the above example, the data processing system determines that the wire transfer maps to, and is associated with the debit from account, credit to account, and overdraft protection production services.

At step 108, the data processing system determines if there is a production service to process or if it has processed all the production services. If there is a production service to process, the data processing system identifies the production service and determines the appropriate billable services associated with the identified production service at step 110. A production service may map to one or more billable services. Continuing the above example, the data processing system may start by processing the overdraft protection production service (step 108). The data processing system then determines that the overdraft protection service maps to a single billable service (step 110).

At step 112, the data processing system determines if there is a billable service to process. If all the billable services for the production service have been processed, the data processing system returns to step 108 to process the next production service. If there is a billable service to process, the data processing system identifies the billable service

10

15

20

25

30

and determines the billing entity (i.e., billable entity) for the billable service at step 114. Continuing the above example, the data processing system determines that for the overdraft protection service, it has to process the associated billable service (step 112) and that the billing entity includes Accounts A, B, C, and D (step 114).

At step 116, the data processing system determines if there is a pricing relationship established for the billable service. Continuing the above example, the data processing system determines that a pricing relationship exists between Accounts A, B, and C for the overdraft protection service. Thus, for the billable service associated with the overdraft protection service requested by Account A, an applicable pricing relationship exists.

At step 118, the data processing system determines the total count of the billable service consumed or purchased by the accounts in the pricing relationship. The data processing system maintains a record of the number of the number of billable service instances purchased by the accounts in the pricing relationship. Continuing the above example, the data processing system determines the number of billable service instances purchased by Accounts A, B, and C up to this point (i.e., tenth day) in the current billing cycle. For example, in this current billing cycle, a total of fifty overdraft protections may have been purchased (none by Account A, twenty by Account B, and thirty by Account C). Thus, the current overdraft protection would be the fifty-first purchased in the current billing cycle.

At step 120, the data processing system calculates a price for the billable service from an associated price table based on the total number of billable service instances. The data processing system applies any applicable volume discount resulting from the billable service instances purchased by the accounts in the pricing relationship. Continuing the above example, the data processing system determines from the price table for the billable service associated with the overdraft protection service that the fifty-first overdraft protection instance purchased results in all the overdraft protection instances purchased by the group of accounts in the pricing relationship to be priced at \$2.00 each. Thus, fifty-one overdraft protection instances is priced at a total price of \$102.00.

At step 122, the data processing system apportions the portion of the total price for the billable service instances to the current billable service being processed.

Continuing the above example, the data processing system apportions a price of \$2.00

10

15

(1/51 of the total price of \$102.00) to the current billable service associated with the overdraft protection. Thus, the current billable service associated with the overdraft protection is priced at \$2.00. Thus, Account A benefits from the billable service instances purchased by Accounts B and C. Company ABC (Account A) receives a volume discount as a result of purchases made by Company XYZ (Account C). The data processing system then returns to step 112 to continue processing the next billable service associated with the overdraft protection service.

The data processing system processes the other production services (i.e., debit from account and credit to account) associated with the financial transaction (i.e., wire transfer) in the manner described above. If, at step 108, all the production services for the financial transaction have been processed, the data processing system calculates the real-time price quote for the requested financial transaction at step 124. The financial transaction price is determined by summing the prices of the associated billable services. The data processing system provides the real-time price quote and ends at step 126.

Those of ordinary skill in the art will appreciate that, for this and other methods disclosed herein, the functions performed in the exemplary flow charts may be implemented in differing order. Furthermore, steps outlined in the flow charts are only exemplary, and some of the steps may be optional, combined into fewer steps, or expanded into additional steps without detracting from the essence of the invention.

20

25

30

Method for Calculating a Variance to a Real-Time Price

In one embodiment, the data processing system recalculates the price for the financial transactions and the associated billable services at the end of the billing cycle to account for and accommodate changes that occurred during a billing cycle. The recalculation may result in a variance to the real-time price quoted and charged for a financial transaction to an account during the billing cycle. A variance to the price may result from reasons such as, by way of example, a change to a billing entity resulting in a change in applicable price table(s), a change to an allocation of an account to different departments or market segments resulting in a change in applicable price table(s), a new price becoming effective during a billing cycle, a change in a pricing relationship, additional financial transactions purchased during a billing cycle, and the like. The data processing system may report the variances between the real-time price and the end-of-billing cycle price to the FSC, for example, as either discounts or adjustments.

10

15

20

25

30

Figure 2 illustrates a flow chart of an exemplary method 200 for calculating a variance to a real-time price with volume discounting. Beginning at a start step 202, the data processing system identifies the financial transactions that occurred during the prior billing cycle. The data processing system may perform a transaction analysis for each financial transaction and determine the associated production services and billable services.

At step 204, the data processing system performs an end-of-billing cycle pricing for each billable service instance that occurred during the just ended billing cycle. In particular, the data processing system, for each billable service instance, determines the account that purchased the billable service instance. The data processing system identifies any applicable pricing relationships for the account. For example, there may have been a change in the pricing relationship. Continuing the above wire transfer example, the pricing relationship may have been changed during the billing cycle to include Account D, and Account D may have purchased forty overdraft protections during the billing cycle.

The data processing system determines an end-of-billing cycle count of the total number of billable service instances purchased by the accounts during the recently ended billing cycle. Continuing the above wire transfer example, between the tenth day of the billing cycle and the end of the billing cycle, Account A may have purchased an additional nine-teen overdraft protection services, for a total of twenty, at a price of \$2.00 each. Thus, the accounts in the pricing relationship at the end of the billing cycle (Accounts A, B, C, and D) purchased a total of one hundred and ten overdraft protection services (twenty by Account A, twenty by Account B, thirty by Account C, and forty by Account D).

At step 206, the data processing system calculates an end-of-billing cycle price for the billable service instances purchased during the billing cycle from the associated price table based on the end-of-billing cycle count. Continuing the above example, the data processing system determines from the price table that at a volume of one hundred and ten overdraft protection services, all the overdraft protection instances purchased by the accounts in the pricing relationship should be charged \$1.00 each. Thus, the one hundred and ten overdraft protection instances is priced at a total of \$110.00.

At step 208, the data processing system modifies the price apportioned to the billable service based on the end-of-billing cycle price. The data processing system

10

15

20

25

30

calculates the variance between the real-time price quoted and charged for each billable service instance and the end-of-billing cycle price for the billable service instance. Continuing the above example, the data processing system determines that Account A was charged a total price of \$40.00 (\$2.00 for each overdraft protection service) for the twenty overdraft protection service instances purchased during the billing cycle. The data processing system calculates the end-of-billing cycle price for the twenty overdraft protection service instances purchased by Account A to be \$20.00 (\$1.00 for each overdraft protection service). Thus, there is a variance of \$20.00 for the twenty overdraft protections service instances purchased by Account A.

The data processing system calculates the variance for the remaining billable services and ends at step 210. In one embodiment, the data processing system generates a report to the FSC to report the end-of-billing cycle pricing. The report may include the calculated variances for each billable service, financial transaction, account, billing entity, etc. Thus, the data processing system efficiently adjusts to and incorporated changes to the billing parameters that occur during a billing cycle.

In one embodiment, a price variance may result from a change to an allocation of an account to a different department or market segment. This may result in a change to one or more applicable price tables for a billable service. The change the applicable price tables may affect the volume discount calculation and any applicable exception pricing calculation. Implementation of exception pricing is described in U.S. Pat. No. 6,052,672.

As described herein, the present invention in at least one embodiment facilitates a real-time pricing of a financial transaction during a billing cycle that accounts for applicable volume discounts. One embodiment of the present invention provides a data processing system that receives and processes a request to provide a real-time price quote for a financial transaction. The data processing system maintains a record of the billable service instances purchased during the billing cycle, and is able to account for applicable volume discounts in calculating a real-time price quote for the financial transaction at any instance in time during the billing cycle.

In at least one embodiment, the data processing system maintains a record of one or more pricing relationships. A pricing relationship may include one or more accounts, one or more services, or a combination or one or more accounts and services. The data processing system maintains a record of the billable service instances purchased by the

10

accounts in an applicable pricing relationship, and is able to account for the applicable volume discounts resulting from the pricing relationship in calculating a real-time price quote for the financial transaction during the billing cycle.

In at least one embodiment, the data processing system performs an end-of-billing period price calculation to identify variances to the real-time price quotes generated during the billing cycle. The calculated variances are reported to the FSC as discounts or adjustments to the price of the financial transactions. The data processing system permits changes to be made during a billing cycle, and the changes are reflected in the previously calculated and quoted real-time prices.

This invention may be provided in other specific forms and embodiments without departing from the essential characteristics as described herein. The embodiments described above are to be considered in all aspects as illustrative only and not restrictive in any manner. The following claims rather than the foregoing description indicate the scope of the invention.